## OIB - HU-25C Guardian 10/20/15 Science Report

Aircraft:

HU-25A Guardian #525 (See full schedule)

Date:

Tuesday, October 20, 2015

Mission: OIB

**Mission Location:** 

Kangerlussuaq, Greenland

**Mission Summary:** 

Mission: Falcon Mopup-Jakobshavn (priority: n/a)

This mission is intended to capture IceSat-1 groundtracks missed due to clouds on the earlier Thomas-Jakobshavn 01 and Jakobshavn-Eqip-Store missions. The lines missed in those flights, and included here, are the uppermost (easternmost) lines, and thus this mission extends our existing measurements of the summer melt signal in the Jakobshavn basin higher on the ice sheet's flank.

Weather today was again almost ideal for this flight, with weak outflow, and clear skies, all along Greenland's west-central flank. However a maddeningly persistent stratus deck remained in the area just bordering on the uppermost lines of this mission, and these clouds prevented us from flying our last remaining high priority mission, K-EGIG-Summit, this morning. This stratus deck has been present in the same general area for two weeks now, and is the reason this mop-up mission was necessary in the first place. There is a possibility that this stratus deck could move east during the morning and open the area for the afternoon, or possibly tomorrow. For this mission, however, the stratus barely affected us at all. It prevented data acquisition for perhaps 20 km along our extreme southeastern line. In all, we estimate that we successfully acquired science data along 98% of the lines today.

Local weather in Kangerlussuaq this morning was clear but quite cold - 0 deg F at takeoff time.

All instruments performed well.

We conducted a ramp pass at 12,000' MSL just prior to landing.

Data volumes: DMS: 18.2 Gb

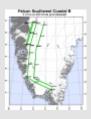
Narrow Swath ATM: 21 Gb

FLIR: 1.8 Gb

total data collection time: 3.5 hrs

#### Images:

# Map of Falcon - Southwest Coastal B



#### Read more

#### ATM's Rob Russell



### Read more

### Submitted by:

John Sonntag on 10/20/15

### Related Flight Report:

# HU-25C Guardian 10/20/15

Flight Number:

OIB2015 Arctic Jakobshavn Mop-Up Payload Configuration:

ATM & DMS

Nav Data Collected:

No

**Total Flight Time:** 

3.7 hours

Submitted by:

Luci Crittenden on 10/20/15

### Flight Segments:

From:	BGSF	То:	BGSF				
Start:	10/20/15 10:17 Z	Finish:	10/20/15 14:00 Z				
Flight Time:	3.7 hours						
Log Number:	<u>16F002</u>	16F002 PI: John Woods					
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryosphere & International Polar Year						
Purpose of Flight:	Science						
Comments:	The HU-25 OIB Falcon completed a mission this morning called the "Jakobshavn Mop-Up" which captured some flight lines previously missed on a past mission due to weather. The aircraft is turning now for an afternoon sortie.						

Flight Hour Summary:

	15F005	16F002
Flight Hours Approved in SOFRS	100	
Flight Hours Previously Approved		67.4
Total Used	32.6	65.3
Total Remaining		2.1

16F002 Flight Reports						
Date	Fit #	Purpose of Flight	Duration	Running Total	Hours Remaining	
10/05/15	OIB2015 Arctic Sea Ice Central	Science	3.6	3.6	63.8	
10/05/15	OIB2015 Arctic Sea Ice East	Science	3.8	7.4	60	
10/06/15	OIB2015 Arctic Ice-Sat2 North	Science	4	11.4	56	
10/07/15	OIB2015 Arctic Transit Thule to Kangerlussuaq	Transit	2	13.4	54	
10/08/15	OIB2015 Arctic Southwest Coastal A	Science	3.8	17.2	50.2	
10/08/15	OIB2015 Arctic Thomas- Jakobshavn 01	Science	3.7	20.9	46.5	
10/09/15	OIB2015 Arctic Umanaq B	Science	3.9	24.8	42.6	
10/13/15	OIB2015 Arctic Jakobshavn Eqip Store	Science	2.9	27.7	39.7	
10/13/15	OIB2015 Arctic Southeast Coastal A	Science	3.6	31.3	36.1	
10/18/15	OIB2015 Arctic Southeast Coastal B	Science	4.1	35.4	32	
10/19/15	OIB2015 Arctic Helheim- Kangerdlugussuaq	Science	3.7	39.1	28.3	
10/19/15	OIB2015 Arctic Helheim- Kangerdlugussuaq Gap B	Science	3.9	43	24.4	

10/20/15	OIB2015 Arctic Jakobshavn Mop-Up	Science	3.7	46.7	20.7
10/20/15	OIB2015 Arctic Southwest Coastal B	Science	3.7	50.4	17
10/21/15	OIB2015 Arctic Southwest Coastal C	Science	3.4	53.8	13.6
10/21/15	OIB2015 Arctic K-EGIG-Summit	Science	3.7	57.5	9.9
10/22/15	OIB2015 Arctic Mopup South	Science	2	59.5	7.9
10/22/15	OIB2015 Arctic Ferry BGSF- CYYR	Ferry	2.2	61.7	5.7
10/23/15	OIB2015 Arctic Ferry CYYR- KRIC	Ferry	3.3	65	2.4
10/23/15	OIB2015 Arctic Ferry CYYR- KRIC	Ferry	0.3	65.3	2.1

**Source URL:** https://airbornescience.nasa.gov/science\_reports/OIB\_-\_HU-25C\_Guardian\_10\_20\_15\_Science\_Report

#### **NASA Home**

Page Last Updated: April 22, 2017

Page Editor: Erin Justice NASA Official: Bruce A. Tagg

- Budgets, Strategic Plans and Accountability Reports
- Equal Employment
  Opportunity Data Posted
  Pursuant to the No Fear Act
- Information-Dissemination Policies and Inventories
- Freedom of Information Act
- Privacy Policy & Important Notices
- NASA Advisory Council
- Inspector General Hotline
- Office of the Inspector General
- NASA Communications Policy
- Contact NASA
- Site Map
- USA.gov
- Open Government at NASA

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

15F005 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	
09/15/15	OIB #1	Check	2.7	2.7	97.3	
09/20/15	OIB #2, 3, 4	Ferry	2.7	5.4	94.6	
09/21/15	OIB #2, 3, 4	Ferry	2.3	7.7	92.3	
09/21/15	OIB #2, 3, 4	Ferry	2	9.7	90.3	
09/23/15	OIB2015 Arctic North Central Gap 02	Science	3.9	13.6	86.4	
09/24/15	OIB2015 Arctic Northwest Coastal A	Science	3.7	17.3	82.7	

					1
09/25/15	OIB2015 Arctic Northwest Coastal B	Science	3.8	21.1	78.9
09/28/15	OIB2015 Arctic Sea Ice West	Science	3.7	24.8	75.2
09/30/15	OIB2015 Arctic North Central Gap 01	Science	3.9	28.7	71.3
09/30/15	OIB2015 Arctic Zachariae-79N	Science	3.9	32.6	67.4